

013665 - Orange County Shoreline, LSAR Watershed, CA

Contributed by Priscilla Perry
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Orange County Shoreline (Lower Santa Ana River Watershed) Feasibility Study

Executive Summary:

The Orange County shoreline, which extends from Seal Beach to Dana Point, is heavily populated along the southern California coastline bordered by Los Angeles County to the north and San Diego County to the south. In the recent past, the shoreline has been plagued with increased levels of bacterial loading in the coastal waters. This study will focus on the segment of the shoreline bounded by Bolsa Chica north of Huntington Beach pier south to the Newport Harbor entrance, a distance of approximately 19 kilometers (12 miles) and to a depth of approximately 200 feet. The signing ceremony is currently scheduled for September 17, 2003 with the Orange County Sanitation District, the local sponsor.

Important Information:

The Los Angeles District completed a reconnaissance of the area, which was completed on April 12, 2001. The reconnaissance 905b study determined that there is a Federal interest in participating in a cost-shared feasibility phase study to evaluate the sediment and water body contamination sources plaguing the nearshore ecosystem environment of the Lower Santa Ana River Watershed. In addition, knowledge of the flow rates within the source area and the average rate of sediment deposition will be assessed to determine an approximate timeline of contamination.

The source of nearshore ecosystem contamination may result from the channelization of urban runoff caused by storm water discharge. The major basins to be investigated include Talbert Marsh, Lower Santa Ana River and Newport Bay (Upper and Lower).

Characterization of nearshore water circulation patterns will be conducted. This task will entail the implementation of dye tracer studies and the deployment of oceanic and airborne instrumentation for data acquisition and collection. The information will then be compiled to develop a synoptic numerical simulation model that can be used as a forecasting tool for predicting the contamination spreading within the nearshore region. The development of this tool will be a crucial asset in mitigating the design and implementation of watershed management plans and contingency strategies for the Lower Santa Ana River Watershed.

Study Participants

The Los Angeles District and the Orange County Sanitation District are responsible for conducting and coordinating the study. Other organizations that have participated and will continue in the study process include the following agencies and groups:

Congressional Representatives:

Congressman Chris Cox
Congressman Dana Rohrabacher

Federal and State Agencies:

United States Geological Survey
California Regional Water Quality Control Board

Colleges

University of Southern California

County of Orange Agencies:

County Board of Supervisors

City Governments:

Anaheim
Brea
Buena Park
Cypress
Fountain Valley

Fullerton
Garden Grove
Huntington Beach
Irvine
La Habra
La Palma
Los Alamitos
Newport Beach
Orange
Placentia
Santa Ana
Seal Beach
Stanton
Tustin
Villa Park
Yorba Linda
Costa Mesa Sanitary
Midway City Sanitary
Irvine Ranch

Frequently Asked Questions

1. Where is the study area located?

The Orange County shoreline extends from Seal Beach to Dana Point. This Study will focus on the segment of the shoreline bounded by Bolsa Chica north of Huntington Beach pier south to the Newport Harbor entrance, a distance of approximately 19 kilometers (12 miles).

2. Why is the Orange County shoreline being studied?

In the recent past, the shoreline has been plagued with increased levels of bacterial loading in the coastal waters. There has been a number of oceanographic, coastal, and riverine investigations conducted within the study area to assess and diagnose the reasons for the increased levels of bacterial loading in the coastal waters adjacent to, and extending approximately 3,000 meters north of, the mouth, of the Santa Ana River in Orange County. The shoreline is a major recreational and commercial resource, attracting millions of visitors each summer. This Study will include preparing a feasibility study that will reveal a plan expected to produce the most economic benefits from among various alternatives to be considered.

3. What are the goals of the Orange County Shoreline Feasibility Study?

To evaluate the sediment and water body contamination sources plaguing the nearshore ecosystem environment of the Lower Santa Ana River Watershed and prepare a feasibility study that will reveal a plan expected to produce the most economic benefits from among various alternatives to be considered.

4. How much does the Feasibility Study cost?

Currently the Study is estimated to cost approximately \$6.8 M. This study cost is to be shared 50/50, whereas, the sponsor can provide their entire share of study costs through the provision of in-kind services.

5. How long will the Feasibility Study take?

The Feasibility Study is estimated to take approximately five years with completion scheduled for mid-2008.

6. What will be the result of the Feasibility Study?

The outcome of the Study will consist of contaminate source identification, characterization of nearshore water circulation patterns, and the preparation of an initial watershed management plan to alleviate any adverse impacts to the nearshore coastal ecosystem.

Upcoming Events

The Signing Ceremony is scheduled for September 17, 2003 at the Orange County Sanitation District Board Room in Fountain Valley at 10 a.m.

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